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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,209	02/12/2004	Lawrence Green	33870.00/710/SP00988.231	3160
46333	7590	08/13/2010		
Medtronic Attn: Noreen C. Johnson, IP Legal Department 2600 Sofamor Danck Drive Memphis, TN 38132			EXAMINER CARTAGENA, MELVIN A	
			ART UNIT	PAPER NUMBER
			3754	
			MAIL DATE	DELIVERY MODE
			08/13/2010 PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/776,209

**Applicant(s)**

GREEN ET AL.

**Examiner**

Melvin A. Cartagena

**Art Unit**

3754

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4, 9 and 16-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9 and 16-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/GS-08)
- \_\_\_\_\_ Paper No(s)/Mail Date \_\_\_\_\_

- 4) ☐ Interview Summary (PTO-413)
- \_\_\_\_\_ Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(c), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(c) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on July 02, 2010 has been entered.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 9, 21-26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,299,492 to Pfauser in view of US 4,854,482 to Bergner.

Pfauser show a pumping system having a mechanism configured to apply high pressure to an incompressible fluid from source 39, a pivotally trigger 15 mounted on one end of housing 6, a manually operable actuator 14 opposite the trigger pivot 16, a supply conduit 20, a flexible conduit 21 carrying fluid to a container with a ram receiving the pressurized fluid, see column 1, lines 20-23, first valve 11, a second valve 23, see Figs. 1 and 2, the first valve allows fluid to leave the pressure chamber 7, the second valve operated to allow fluid to return to the reservoir, the threshold pressure of the second valve is greater than the threshold of the first valve and connector means 22. Pfauser is silent about releasing some of the fluid externally to the fluid

source. Bergner shows a material dispenser as seen in Fig. 1, having valves 10 to vent air and working fluid out external to the fluid source. It would have been obvious to a person with ordinary skill in the art at the time of the invention to modify the device of Pfauser by venting air and working fluid external to the fluid source to eliminate any air from the system as taught by Bergner.

4. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,299,492 to Pfauser as modify by US 4,854,482 to Bergner as applied to claim 1 above, and further in view of US 4,250,887 to Dardik et al.

The Pfauser-Bergner combination show all claimed features as discussed above but are silent about the length of the flexible tubing being long enough to permit a user to be outside of a radiation field of a patient being imaged. Dardik show a remote manual injecting apparatus as seen in Fig. 1, with flexible tubing 33 long enough to permit a user to be outside of a radiation field 10 of a patient being imaged 12. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to provide the device of the Pfauser-Bergner combination with a long enough flexible tube to distance the operator from the radiation source and prevent exposing an operator to harmful radiation as taught by Dardik.

5. Claims 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,299,492 to Pfauser as modify by US 4,854,482 to Bergner as applied to claim 1 above, and further in view of US 5,015,233 to McGough et al.

The Pfauser-Bergner combination show all claimed features as discussed above but are silent about a syringe with a plunger connected to the pressure pump and the working pressure range of up to 5000 PSI. McGough show a syringe 12 having a plunger 10 connected to the

pressure pump as seen in Fig. 1. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use a syringe with a plunger connected to the pressure pump of the Pfaußer-Bergner combination to dispense from the syringe with ease and control as taught by McGough.

In reference to claims 16 and 20, it would have been obvious to a person with ordinary skill in the art at the time the invention was made to modify the device of the Pfaußer-Bergner combination to work in any suitable pressure range, including 5000 PSI, since the pressure required to dispense a product is a function of factors such as the required dispensed flow rate, type of nozzle assembly and viscosity of the material being dispensed.

6. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,299,492 to Pfaußer as modified by US 4,854,482 to Bergner as applied to claim 21 above, and further in view of US 4,776,618 to Barree.

The Pfaußer-Bergner combination shows all claimed features as discussed except for a hollow housing for receiving the conduit with a ferrule and a seal surrounding and sealing the conduit against a set screw. Barree shows a sealing structure having a hollow housing 70, a ferrule 40, a seal 60 and a set screw 10 surrounding and sealing the conduit 20. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use the sealing structure of Barree in the device of the Pfaußer-Bergner combination to provide the combination device with a coupling that can withstand very high pressures as taught by Barree.

7. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over US 2,299,492 to Pfaußer as modified by US 4,854,482 to Bergner as applied to claim 21 above, and further in view of US 4,823,588 to Bussereau et al.

The Pfauser-Bergner combination show all claimed features as discussed except for a pressure release mechanism pivotally rotatable about a pin and a relief valve between the fluid source and the pressure mechanism for releasing the fluid back to the source when pressure exceeds a threshold. Bussereau shows a pneumatic hand actuated tool as seen in Fig. 2, having a pressure release valve 21 actuated by a lever 20 pivotal on a pin and a return valve on conduit 15. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to use a pressure release and return valve in the device of the Pfauser-Bergner combination to improve manual control of the pneumatic pump as taught by Bussereau.

***Response to Arguments***

8. Applicant's arguments with respect to claims 1-4, 9, 16-29 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin A. Cartagena whose telephone number is (571) 272-4924. The examiner can normally be reached on M-TH (8:30AM to 7:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin P. Shaver can be reached on (571) 272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. A. C./  
Examiner, Art Unit 3754

/Kevin P. Shaver/  
Supervisory Patent Examiner, Art Unit 3754